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Understanding Financial Practices: Experiences with 'Eighty Somethings' and the Underbanked

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Abstract
Understanding financial practices and designing financial interactions is set to become an important area of research in human-computer interaction, as financial institutions increasingly place services online. In this position paper we highlight our experiences working with two groups underserved by financial institutions in the UK: (i) people over the age of 80; and (ii) people on a low income. These projects highlight the generational and socio-economic practices of managing money, and how the complex offline financial practices we observed are not yet adequately supported by digital banking technologies.

Author Keywords
Banking; trust; money; older old;

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
Today, in much of the western world there is scrutiny upon the role of financial institutions. Against the backdrop of government rhetoric of *financial inclusion* in the United Kingdom (UK) around 2007, it was highlighted that being able to access and manage money is prerequisite to participate fully in modern society, and that banks should do more to support their

Figure 1: A research participant using our "digital cheques" prototype [6]**.**

Figure 2: An example of a 'Questionable Concept', a PIN reminder provided by a fingerprint activated thimble [7]**.**

customers in minority groups. However, there was a genuine concern that the wave of technologies that has resulted might not be directed towards sections of the population who might derive the most benefit from new and appropriately designed services and technologies.

Understanding what 'appropriately' designed technologies are is a challenge due to the cultural [4] and generational practices surrounding money and banking. In this position paper we briefly describe two projects that engaged with two highly diverse and heterogeneous groups: (i) people over the age of 80; and (ii) the underbanked. In these projects we aimed to understand participants' financial practices and role of digital banking technology in their everyday lives.

Banking for Eighty Somethings

The needs of the older old are seldom considered in relation to current and future banking services. A report published by Age UK [1] found that banks were poor at providing information on services relevant to older people and that there is little to no provision for people who have to rely on others to carry out financial transactions for them. We employed a number of methods to work with *eighty somethings* (a more pleasant descriptive term than *older old*) —initial scoping interviews with a small group of participants [3], followed by the development of novel design cues [7] responding to their concerns (Figure 2), and a series of subsequent participatory design engagements to envision future technologies and services [6] (see Figure 1). We will describe one component of this research where we aimed to understand how the eighty somethings that we interviewed used cash and banking facilities, along with their values and concerns about financial services in general.

Method

We conducted a small scale in-depth qualitative study investigating the meaning of money to people aged over 80. 12 people aged 80+ were asked to tell their 'financial biographies'. In addition, interviews were conducted with care professionals and experts from the financial sector. Interviews lasted between two and three hours and participants enjoyed relating their life story and were relaxed enough to share some quite intimate details with the interviewer.

Selected Findings

The interview transcripts were analysed through a grounded theory methodology. Data was summarised with open-ended codes. Four themes emerged from this analysis; materiality, control, locality; full details of the study can be found in [5]. In the following we give a brief summary of some selected insights.

Our participants grew up during a period where financial transactions were cash-based. Salaries were paid in cash and rent money was collected from the doorstep. A location from which everyday perishables such as milk and bread were also sold. Relying upon the flexibility of cash, and its *materiality* to understand expenditure was a commonly adopted approach. The perception that paper-based financial instruments offered *control* over finances was important to all of our participants. This control was essential to support them to stay out of debt; the possibility of which drove meticulous financial record keeping.

The participants in the study had spent most of their lives within a highly *localised* area. It was not unusual for people to have lived on the same street their entire lives, going to school and working in nearby streets. Similarly, the services they used—financial or otherwise—were situated within the neighbouring

Figure 3: A 'Helper Card'. A proposed solution to support spontaneous and secure financial delegation [3]**.**

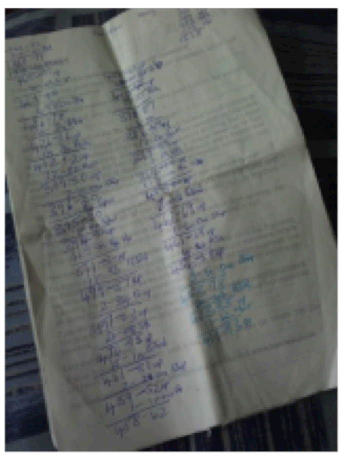

Figure 4: An example of the paper records kept by one of our research participants [9]**.**

locale. This familiarity and sense of community influenced many of their dealings with money. The interviews revealed how many of the participants' had intimate dealings with other people's finances and, in later life, having others deal with theirs. The transition to using passwords and PINs had seen the continuation of these sharing practices, with participants frequently giving their security credentials to friends, family and carers. In later work we explored how participants would delegate financial tasks to friends, family, and complete strangers [3] (see Figure 3).

Banking for people on a low-income

Recent reports suggest that 97% of people in the UK have access to a bank account [2]. However, this figure disguises the fact that up to 23% of bank account holders are 'underbanked'. Due to a combination of circumstances, these account holders are not able to use many of the facilities that many take for granted—often as a result of their low income. While there might be much to gain from digital banking for this group, the specific needs of these individuals are not well catered for by currently available systems. Our research aimed to understand participants' experiences of money, banking and the role of digital technology in their financial practices.

Method

We conducted 15 semi-structured interviews in peoples' homes and 5 workshops with a further 23 participants**.** All participants had an income under the UK's Absolute Low Income Measure (£251.40 per week). We worked with representatives of two community outreach organisations, a local government supported housing provider, and two older persons advocacy services to refine our recruitment procedures. Following consultation, it was decided that as well as adopting the above official definition of low income, participants should live within neighbourhoods with populations of higher than national averages of unemployment and lower than national average incomes.

Selected Findings

Our grounded theory analysis revealed five themes: lifestyle, routines and making adjustments; managing and negotiating priorities; categorising, designating and restricting expenses; record keeping to keep control and plan ahead; and threats and fears. Full details can be found in [9].

Money management was a fundamental part of most of the participants' daily lives. Almost all had a continual, if peripheral, awareness of what their bank account balance should be at any time. For many, their low income status was a result of a significant change in circumstances (e.g. losing a job, health issues), and many explained how they struggled to adapt to their new financial situation and, initially, continued to spend money that they just did not have. For example, participants who had previously received a regular income found it difficult to quickly adapt their spending, while others had to initially spend more money to find new work (e.g. paying for travel to interviews).

Coping with less regular incomes meant that many of our participants consciously prioritized certain bills over others. Many explained how they had occasions where overspending on something they deemed non essential—such as an item of clothing or spending more on unnecessary multi-buy offers at the supermarket—had meant they did not have enough money left for bills they considered critical such as rent, mortgage repayments or utilities.

Like the eighty somethings, a common approach participants used to keep on top of their finances was to keep intricate records of their expenses (see Figure 4). These records would be kept in designated books, diaries or ledgers or in detailed spreadsheets on a computer. Those that kept such detailed records would also typically keep all of their receipts for a given period so that they could be checked off against bank statements. While there was a fear of security of online banking in general, others took a more critical stance that banks and service providers are only providing such services to make money or to share their data to government agencies—a genuine concern for those participants on government benefits.[3]

Discussion and Conclusions

Across both projects there were similarities; both groups of participants felt that the perception of financial control was important, and managing money was a prominent and very explicit activity in their everyday lives. One issue prominent for the eighty something participants was (in 2011) the impending removal of paper cheques from circulation in the UK. Grievances were centred upon the contention that digital technologies did not provide the same sense of flexibility and security as provided by paper cheques [8]. To those of our participants on a low income, particular pillars of digital banking simply ran contrary to what they valued. Payment methods such as immediate online payments and direct debits were felt to disrupt fine-grained control over finances.

While it is likely that some of our participants would never find use for digital payment technologies—and indeed some would actively discourage others to use them—future work can still hope design new payment systems that are sensitive to the needs and values of the groups we have worked with. New banking technologies should better support – and not replace - financial practices that have significant and complex offline components. Such advances appear to be within the realm of possibility, but require an increased sensitivity to these issues from the banking industry.

References

1. Age UK. The Way We Pay. 2011. http://www.ageuk.org.uk/professional-resources-home/policy/consumer-issues/.
2. Demirguc-Kunt, A. and Klapper, L. Measuring financial inclusion: The global findex database. 2012.
3. Dunphy, P., Monk, A., Vines, J., Blythe, M., and Olivier, P. Designing for Spontaneous and Secure Delegation in Digital Payments. Interacting with Computers 10.1093/iwc/iwt038.
4. Singh, S., Cabraal, A., Demosthenous, C., Astbrink, G., and Furlong, M. Password sharing: implications for security design based on social practice. In: Proc. CHI ’07, ACM (2007), 895–904.
5. Vines, J., Blythe, M., Dunphy, P., and Monk, A. Eighty Something : Banking for the older old. In: Proc. BCS HCI ’11, BCS (2011), 64–73.
6. Vines, J., Blythe, M., Dunphy, P., et al. Cheque Mates: Participatory Design of Digital Payments with Eighty Somethings. In: Proc. CHI ’12, ACM (2012), 1169–1178.
7. Vines, J., Blythe, M., Lindsay, S., Dunphy, P., Monk, A., and Olivier, P. Questionable Concepts: Critique as a Resource for Designing with Eighty Somethings. In: Proc. CHI ’12, ACM (2012), 1169–1178.
8. Vines, J., Dunphy, P., Blythe, M., Lindsay, S., Monk, A., and Olivier, P. The joy of cheques: trust, paper and eighty somethings. In: Proc. CSCW ’12, ACM (2012), 147–156.
9. Vines, J., Dunphy, P., and Monk, A. Pay or Delay: The Role of Technology When Managing a Low Income. In: Proc. CHI ’14, ACM (2014).